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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/402,112 02/18/00 KAWAKAMI

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MMCI/1115

EXAMINER

RANDALL J. KNUTH

HENRY, J.

RANDALL J. KNUTH

ART. UNIT	PAPER NUMBER
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3510 A STELLHORN ROAD

FORT WAYNE IN 46815-4631

2872

#7

DATE MAILED:

11/15/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.
09/402,112

Applicant(s)
Shijiro Kawakami et al

Examiner
Jon W. Henry

Group Art Unit
2872



☒ Responsive to communication(s) filed on Feb 18, 2000

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 35 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire ONE (1) month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claim

☒ Claim(s) 1-18 is/are pending in the applicat

Of the above, claim(s) _____ is/are withdrawn from consideration

☐ Claim(s) _____ is/are allowed.

☐ Claim(s) _____ is/are rejected.

☐ Claim(s) _____ is/are objected to.

☒ Claims 1-18 are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☒ All ☐ Some* ☒ None of the CERTIFIED copies of the priority documents have been
☐ received.

☐ received in Application No. (Series Code/Serial Number) _____.

☒ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☐ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

— SEE OFFICE ACTION ON THE FOLLOWING PAGES —

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DETAILED ACTION

Election/Restrictions

1. Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in response to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 5 and 6, drawn to a three-dimensional periodic structure including silicon and related methods of forming in particular ways.

Group II, claim(s) 7 and 8, drawn to a three-dimensional periodic structure including depressions that are reshaped.

Group III, claim(s) 9/2 and 9/4, drawn to a structure that may include nonlinear or electro-optic properties formed in particular ways.

Group IV, claim(s) 9/6, drawn to a structure that includes silicon and may include nonlinear or electro-optic properties.

Group V, claim(s) 10/2, 10/4, 12/2 and 12/4, drawn to a structure that may include a light emitting arrangement formed in particular ways.

Group VI, claim(s) 10/6 and 12/6, drawn to a structure that includes silicon and may include a light emitting arrangement formed in particular ways.

Group VII, claim(s) 11, drawn to a structure that may include a waveguide.

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Group VIII, claim(s) 13, drawn to a transparent structure showing three-dimensional optical biaxial anisotropy.

Group IX, claim(s) 14 and 15, drawn to a diffraction grating and related method.

Group X, claim(s) 16/2 and 16/4, drawn to a transparent periodic structure showing optical biaxial anisotropy formed in particular ways.

Group XI, claim(s) 16/6, drawn to a transparent periodic structure showing optical biaxial anisotropy formed in particular ways.

Group XII, claim(s) 17, drawn to a transparent periodic structure showing particular dispersion.

Group XIII, claim(s) 18/2 and 18/4, drawn to a transparent periodic structure showing particular dispersion and formed in particular ways.

Group XIV, claim(s) 18/6, drawn to a transparent periodic structure including silicon, showing particular dispersion and formed in particular ways.

2. The inventions listed as Groups I-XIV do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons. Inventions II, IV, VI, VIII, IX, and X are clearly differentiated by separate features. Similarly, inventions I, VIII, IX, and X are clearly differentiated by separate features.. In all those relationships, it appears any special technical features of those inventions relate to the separate claimed features of those inventions until a broader claim related to those inventions is found allowable. The inventions are also variously

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related as combinations and subcombinations with features of various subcombinations entangled in the combinations. For example, inventions of Group I and II are variously combined with the inventions IX and XIII in inventions XI, XII, XIV, and XV. Claims to the various subcombinations evidence the combinations are not relying on the details of either specific subcombination for patentability. See MPEP 806.05© Section III (Although restriction practice does not apply to unity of invention practice, the logic that MPEP section applies equally to prevent an applicant from forcing examination of an unlimited number of related but independent and distinct inventions in one application by including a "picture" claim combining the features of all those inventions).

3. Claims 1-4 link(s) inventions II, IV, V, VI, VII. Claims 1 and 3 are deemed to be linking claims as being equally obvious as the purely broader linking claims over the claims to the inventions they link. Claims 1-4 do not link other inventions including their features because other claims evidence the other combinations including those features are not relying on those features for patentability as set out in item no. 2 above. The lack of unity requirement among the linked inventions is subject to the nonallowance of the linking claim(s). Upon the allowance of the linking claim(s), the lack of unity requirement as to the linked inventions shall be withdrawn and any claim(s) depending from or otherwise including all the limitations of the allowable linking claim(s) will be entitled to examination in the instant application. Applicant(s) are advised that if any such claim(s) depending from or including all the limitations of the allowable linking claim(s) is/are presented in a continuation or divisional application, the claims of the continuation or

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divisional application may be subject to provisional statutory and/or nonstatutory double patenting rejections over the claims of the instant application. Where a lack of unity requirement is withdrawn, the provisions of 35 U.S.C. 121 that apply equally to lack of unity requirements as to restriction requirements are no longer applicable. See *In re Ziegler*, 44 F.2d 1211, 1215, 170 USPQ 129, 131-32 (CCPA 1971).

4. A telephone call was not made to applicants' representative to request an oral election to the above lack of unity restriction requirement because of the complexity of the requirement.

5. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

6. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(I).

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jon W. Henry whose telephone number is (703) 305-6106.

jwh

August 25, 2000



Jon Henry
Primary Examiner